

Lithologic Log Addendum

Well BLM-23-431

Cuttings of the lithologic unit from well BLM-23-431 were sent to the Department of Geological Sciences, New Mexico State University (NMSU), Las Cruces, New Mexico, for detailed petrographic analysis when identification of fine-grained, highly altered volcanic rocks at the NASA-WSTF site became difficult using conventional field methods. Petrographic reports from NMSU were received after the printing of these lithologic logs, hence the need for this addendum. The petrographic description from NMSU is included below.

Previous unit name based on field identification: **Andesite**

New Unit name based on petrographic analysis: **Porphyritic Latite**

BLM-23-431 (500 - 503', core)

Porphyritic hornblende latite

Microphenocrysts of plagioclase (0.5 - 2.0 mm) and hornblende (0.5 - 4.0 mm) form a slightly glomeroporphyritic arrangement in a seriate, intergranular matrix of blocky plagioclase, hornblende, - enstatite and magnetite. Majority of the euhedral plagioclase phenocrysts are sodic andesine to oligoclase; some are zoned and some are poikilitic with hornblende, biotite and magnetite crystalites. A few poikilitic phenocrysts have corrosion rims and sodic andesine overgrowths. Mafic minerals are generally fresh appearing but a few hornblende phenocrysts are embayed and oxidized. Overall composition is 25% phenocrysts, predominantly plagioclase, in 75% matrix. Porosity appears very low to nil. Rock probably originated as a hypabyssal intrusive.